Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.

DUTIES This is a non-career term job at the Metropolitan Washington Airports Authority (Airports Authority). Serves as a Business Intelligence Specialist, Data/ETL (extract, transform, and load) in the Enterprise Business Innovation & Analytics (EBIA) Department of the Office of Technology (Office). Participates in and drives data strategy; develops and maintains applications to extract, transform, and load data from disparate source systems to implement and integrate Business Intelligence (BI) solutions for the Airports Authority. Performs related functions.

--Designs, developments, and implements strategic data initiatives, such as enterprise data warehouse (EDW), master data, data governance, data quality, meta data management, and data marts. Assists the EBIA Director with daily information management and Data/ETL operations.

--Administers and monitors automated and manual data integration and Data/ETL jobs to verify execution and measure performance. Builds reports to audit, monitor, and validate data warehouse jobs. Maintains all production data warehouse integration projects; working with developers to replicate, troubleshoot workarounds, or resolve technical issues, escalating problems as necessary to Office management.

--Implements program standards, policies, and procedures to support the Airports Authority-wide metadata, data warehouse administration, and information program. Provides technical assistance and advice concerning data management and design to the application development and Enterprise Architecture project teams, the client community (Airports Authority end-users, business stakeholders), and Office staff.

--Develops the design and Data/ETL coding of Source Dependent Extracts (SDE), Source Independent Loads (SIL), and Post Load Processes from source to target systems for operational data stores and dimensional data warehouses using industry leading tools, such as INFORMATICA, preferably in a Platform as a Service (PAAS) setting and into an in-memory or Massively Parallel Processing (MPP) platform, such as Netezza, Redshift, or into a Structure Query Language (SQL) Server/Oracle Data Warehouse, using near real-time loads and Change Data Capture (CDC).

--Designs, develop, and implements the Airports Authority-wide metadata and information management program, such as the development of enterprise conceptual, logical and Physical data models including ORACLE BI APPS or NOETIX VIEWS/ANALYTICS. Provides data architecture support services to major application development initiatives within an agile environment.

--Creates and maintains documentation of the EDW technical landscape, including data movement, data aggregation, data quality, and data cleansing. Designs and implements relational, multidimensional, and tabular data models as required. Develops strategies and approaches that ensure the proper integration of data and information management. Helps to

define the overall data warehouse architecture to include, but not limited to, the Data/ETL process, Operational Data Store (ODS) system, EDW, and data marts with team members.

--Prepares and presents strategic and day-to-day operational analytics, such as location intelligence with geographic information system (GIS) and spatial data, to senior Office managers and business stakeholders to drive changes in business practices, metrics, and performance.

--Ensures that source code is reliably backed up and versioned to prevent disruption to the team while working to complete the stated objectives. Develops the guidelines and standards for coding in-house and ensures that the vendor supplied code is consistent with the established standards.

--Communicates and interacts effectively with internal and external business contacts including, but not limited to, other members of the unit/team, other members of the Office of Technology, other Airports Authority employees (such as managers, supervisors, professionals, and support staff), vendors, and suppliers.

--Uses a computer and (a) modern office suite software for various applications such as, but not limited to, planning/scheduling, communicating (email), word processing, data manipulation (databases and spreadsheets), charts/graphics and presentations; (b) enterprise systems/software (such as ERP) to collect, store, manage and interpret data from business activities; and (c) specialty systems/software used in the Office for BI development and other software development functions.

--*Performs related duties as assigned.*

Critical features of this job are described under the headings below. They may be subject to change through reasonable accommodation or otherwise.

MINIMUM QUALIFICATIONS (MQs)

To be rated qualified for this job, an applicant must meet all of the MQs listed below at the time of vacancy announcement closure.

1. A Bachelor's Degree in Computer Science, Engineering, Mathematics, or Statistics providing a strong foundation for success in the DUTIES in this job description, or an equivalent combination of education, experience and training that totals four years.

2. Eight years of <u>progressively responsible</u> experience in data warehousing and the data integration domain, including experience in (a) applying data modeling techniques and (b) ETL coding.

   Education and training beyond what is needed to satisfy MQ 1 above may be substituted for up to two of these eight years of experience (MQ 2) on a week-to-week basis provided the

education and training provide evidence of the knowledge, skills and abilities required by items 2(a) through 2 (b).

PREFERRED QUALIFICATIONS

The qualifications listed below (if any) are preferred and may be considered in the selection process, but they are not required to be rated qualified for this job.

1. A Master's Degree in Computer Science, Engineering, Mathematics, Decision Science, or Statistics.

2. Experience developing ETL, using industry leading tools, such as INFORMATICA.

3. Experience in Location Intelligence with GIS and spatial data.

KNOWLEDGE, SKILLS, ABILITIES AND OTHER FACTORS (KSAOs)

The following KSAOs are required for successful performance of this job and are a basis for rating and ranking applicants who are found to meet the MQs. *Local, Federal, airport industry or Airports Authority-specific bodies of knowledge listed below may be acquired on the job, typically; ability to rapidly acquire them is required at the time of vacancy announcement closure.*

1. Knowledge of designing, developing, and implementing a corporate data architecture program with responsibility for enterprise conceptual/logical data modeling, data policies, standards and compliance monitoring, metadata mapping, data governance, and as-is/target data architecture to participate in the design, development, and implementation of strategic data initiatives, such as EDW.

2. Knowledge of designing, developing, and implementing enterprise information strategy, enterprise data warehouse, master data management, data integration and transformation, data analysis, data mapping, data governance, and data quality to obtain optimal data and translating it into meaningful and actionable information for making strategic business decisions.

3. Knowledge of overall data warehouse architecture (e.g. ETL process, ODS, EDW, and data marts) to integrate large structured and unstructured data in multiple formats, character sets, and delivery methods. Knowledge of and experience working with SQL Server/Oracle Data Warehouse, using near real-time loads and CDC with CRM and ORACLE ERP data with INFORMATICA.

4. Knowledge of current database management systems used by the Airports Authority, such as ORACLE, Microsoft SQL, and data warehouse solutions operating for the Oracle ERP environment, including OBIEE, ORACLE BI APPS or NOETIX VIEWS/ANALYTICS to centrally manage and analyze data originating from disparate source systems.

5. Skill to analyze data and established procedures within the organization to apply technology principles, methods, and practices to manage and lead staff and contractor personnel in developing, maintaining, and enhancing the Airports Authority-wide information management program, which includes data architecture and data governance activities.

6. Skill in problem solving to select, organize, and logically process relevant information (verbal, numerical, or abstract) to solve a problem. This includes the ability to recognize subtle aspects of problems, identify relevant information, and make balanced recommendations and decisions. Examples include analyzing data, identifying areas of improvement, and designing effective solutions and developing relevant metrics for tracking process efficiencies or developing methods for data driven decision making.

7. Interpersonal skills to interact effectively with business contacts in a businesslike, customer service-oriented manner. This includes the ability to work well with individuals throughout all levels of the Airports Authority. Examples include collaborating within all levels of the Office and the various business stakeholders and team members to define and implement solutions.

8. Skill in oral communication to understand verbal information (including instructions, descriptions, and ideas) and to express such information verbally so that others will understand. This includes the ability to encourage oral communication by others such as senior leadership, business stakeholders, and project managers. Examples include presenting technical information, advice, findings, and recommendations to both technical and non-technical audiences during meetings and presentations.

9. Skill in written communication to understand written information (including instructions, descriptions, and ideas) and to express such information in writing so that others will understand, and concerning some issues, be convinced or persuaded. Examples include reviewing the written work of others, such as reviewing sprint backlogs and issue logs and preparing status reports and documentation for new processes, policies, and procedures.

10. Skill in using a computer and (a) modern office suite software (such as MS Office) to plan, schedule, communicate, word process, prepare and develop reports, and perform research (Internet use, as in searching for performance information and keeping up with technology); (b) enterprise systems/software (such as ERP) to collect, store, manage and interpret data from business activities; and (c) specialty systems/software used in the Office for BI development and other software development functions.

RESPONSIBILITY Is responsible for extracting, transforming, and loading data (Business Intelligence) and executing a data and analytics strategy that helps guide data driven decisions at the Airports Authority. Work supports the strategic goals of the Airports Authority to understand and analyze business performance and realize new business opportunities.

Reports to the Manager, Data and Analytics (Supervisor). Most work flows to the incumbent as a result of assigned functions and established work processes. The Supervisor provides broad

objectives and policy guidance for recurring assignments and, in consultation with the incumbent, brief instructions and time frames for special projects. Most work is accomplished independently but requires collaboration with colleagues. The incumbent collaborates with and keeps the Supervisor informed and typically elevates only highly complex or highly sensitive issues for assistance in resolution. Work is typically reviewed in terms of quantity, quality, timeliness, customer service, teamwork adherence to guidelines, and other factors, including specific performance management requirements.

Guidelines and references include but are not limited to, Office policies, procedures, and standards (e.g. Office of Technology Standards, Change Management Process, Root Cause Analysis Procedure, Technology Advisory Committee Project Submittal Procedure, Electronic Communications System Policy, and Enterprise Technology Management Policy, etc.); Information Technology Infrastructure Library (ITIL), PMO best practices, etc. The incumbent uses seasoned judgment to adjust and apply guidelines to particular situations and to recommend or develop new data and analytics policies, procedures, and processes.

EFFORT The work is primarily sedentary, but requires moving about to obtain work information. The incumbent may sit for extended periods while performing desk work. Regularly uses a computer, a telephone and other office equipment. Typically exerts light physical effort in opening/closing file drawers, retrieving files and otherwise moving about. Regularly reviews computer screens, printouts, contracts, and regulations containing small print.

WORKING CONDITIONS Works primarily in an adequately lighted, ventilated, and temperature controlled office and conference rooms.

OTHER SIGNIFICANT JOB ASPECTS None.